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## WHAT IS CLAIMED IS:

1. (Amended) A method for controlling a pest population, said method comprising:

contacting said insect or arachaid population with an effective pest growth modulating amount of a formulation comprising 0.01 g/l to 25 g/l of one or more compounds having a formula

$$R_2$$
 $R_3$ 

wherein  $R_1$  represents –CHO,  $R_2$  represents –OH, [H] –H or an organic subtituent containing from 1 to 10 carbon atoms, and  $R_3$  represents a methoxy group, [H] –H or an organic substituent containing from 1 to 10 carbon atoms; and wherein said formulation does not contain an antioxidant other than an antioxidant according to said formula.

2. The method according to Claim 1, wherein said growth modulating amount is 2.5 g/l to 12.5 g/l.

3. The method according to claim 3, wherein said one or more compounds are of cinnamic aldehyde or coniferyl aldehyde.

4. The method according to Claim 3, wherein said formulation provides for about 70% or greater kill of said insect or arachnid population.

5. (Amended) The method according to Claim 1, wherein said formulation is free of antioxidants other than compounds of a formula

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$$R_2$$
 $R_3$ 

wherein  $R_1$  represents -CHO,  $R_2$  represents -OH, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, and  $R_3$  represents a methoxy group, [H] -H or an organic constituent containing from 1 to 10 carbon atoms.

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6. The method according a Claim 1, wherein said insect or arachnid population is selected from the group consisting of a cockroach, an ant, and a mite.

7. (Amended) A composition suitable for use as bait for insect or arachnid comprising:

one or more compound having a formula

$$R_2$$
 $R_3$ 

wherein R<sub>1</sub> represents -CHO, R<sub>2</sub> represents -OH, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, and R<sub>3</sub> represents a methoxy group, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, wherein said compound is not cinnamic aldehyde, associated with a solid support.

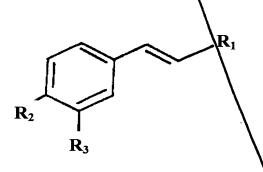
8. (Amended) A composition suitable for use as a shampoo or a soap, said composition comprising:

an insect or arachnid growth modulating amount of one or more compound of a formula

$$R_2$$
 $R_3$ 

wherein  $R_1$  represents -CHO,  $R_2$  represents -OH, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, in a soap or detergent formulation and  $R_3$  represents a methoxy group, H or an organic substituent containing from 1 to 10 carbon atoms, to provide a kill of about 70% or greater of a target insect or arachnid population.

- 9. The composition according to Claim 8, wherein said one or more compounds are cinnamic aldehyde arceniferyl aldehyde.
- 10. (Amended) The composition according to Claim 9, wherein said formulation is free of antioxidants other than compounds of formula



wherein  $R_1$  represents -CHO,  $R_2$  represents -OH, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, and  $R_3$  represents a methoxy group, [H] -H or an organic substituent containing from 1 to 10 carbon atoms.

- 11. The composition according to Claim 10, wherein said composition comprises compounds of cinnamic aldehyde and coniferyl aldehyde.
- 12. (Amended) A composition according to Claim 7 or 17, wherein said solid support comprises collulose.



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13. (Amended) The composition according to Claim 12, wherein said one or more compound of the formula

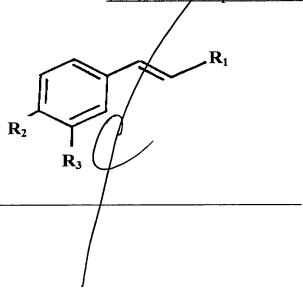
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$$R_2$$
 $R_3$ 

wherein  $R_1$  represents -CHO,  $R_2$  represents -OH, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, and  $R_3$  represents a methoxy group, [H] -H or an organic substituent containing from 1 to 10 carbon atoms, is associated reversibly with said cellulose.

- 14. (Amended) A composition according to Claim 12, wherein said association is via a [cellulase] cellulose binding domain.
- 15. (Amended) A composition according to Claim 7 or 17, wherein said solid support is enclosed in a housing having means of ingress and egress for said insect or arachnid.
- 16. (Amended) The composition according to Claim 7 or 17, wherein said solid support is enclosed in a housing having means of ingress and egress for said insect or arachnid.
  - -17. (New) A composition comprising:

    one or more compound having a formula



wherein R<sub>1</sub> represents –CHO, R<sub>2</sub> represents –OH, – H or an organic substituent containing from 1 to 10 carbon atoms, and R<sub>3</sub> represents a methoxy group, –H or an organic constituent containing from 1 to 10 carbon atoms, wherein said compound is coupled to a solid support. —.

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